

# GEOGRAPHIC SCHOOL BULLETINS

*Published Weekly by*

## THE NATIONAL GEOGRAPHIC SOCIETY

(The National Geographic Society is a scientific and educational Society, wholly altruistic, incorporated as a non-commercial institution for the increase of geographic knowledge and its popular diffusion. General Headquarters, Washington, D. C.)

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Contents for Week of October 19, 1942. Vol. XXI. No. 15.

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*Harald P. Lechenberg*

### A BLACK HUMAN CONVEYOR BELT BUILDS WHITE SALT PYRAMIDS IN ERITREA

While dripping Arabs fish for pearls at Massaua and natives mine some gold on the cool Hamasein plateau, the real treasure of Eritrea is sparkling, dazzlingly white salt. At Massaua, Assab, and elsewhere on the burning Red Sea coast, briny water is led into shallow pools, where the hot sun evaporates it, leaving a crust of salt. Ragged Moslems, turbaned against sunstroke, scoop up a bucketful apiece and climb single file to deposit it on a growing white pyramid. A wooden ladder gives them a foothold. Eritrea produces 200,000 tons of salt a year, exporting as much as three-fourths of it. Japan, a leading customer, sent for it in special salt boats. The salt mounds are sights to be seen by Americans stationed in Eritrea (Bulletin No. 2).

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### HOW TEACHERS MAY OBTAIN THE BULLETINS

The Geographic School Bulletins are published weekly throughout the school year (thirty issues) and will be mailed to teachers in the United States and its possessions for one year upon receipt of 25 cents (stamps or money order); in Canada, 50 cents. Entered as second-class matter, Jan. 27, 1922, Post Office, Washington, D. C., under act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of Oct. 3, 1917, authorized Feb. 9, 1922. Copyright, 1942, by National Geographic Society, Washington, D. C. International copyright secured. All rights reserved. Quedan reservados todos los derechos.

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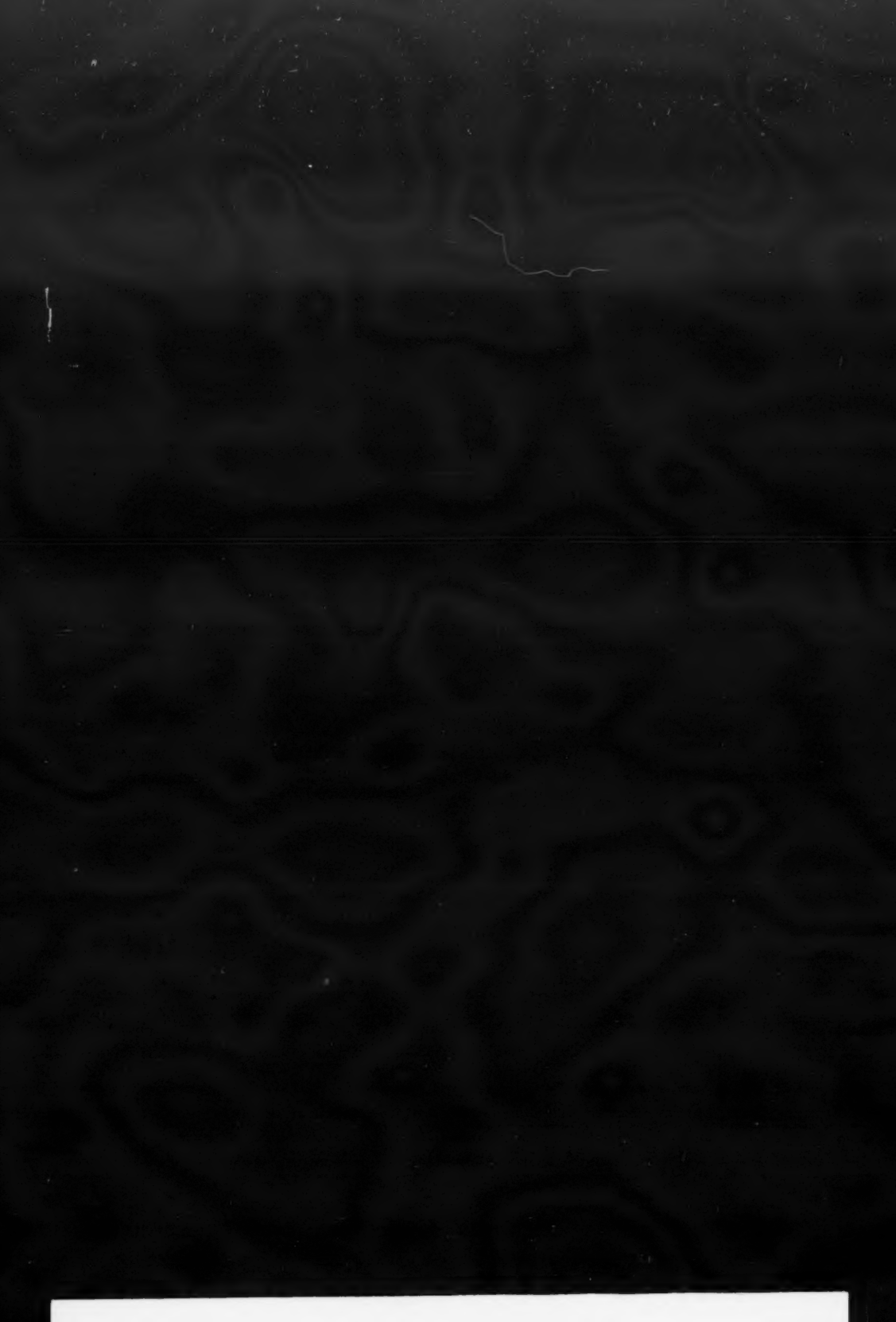
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### Facts about the Foggy Aleutians

THE first fringes of North America to be invaded in the present war were the remotest islands of the Aleutian chain, Attu, Agattu, and Kiska, which the Japanese occupied after bombing Dutch Harbor, then the nearest U. S. base.

In a counter move recently announced, United States forces established a bomber base in the Andreanof group of the Aleutians, a cluster about midway in the chain. The largest of the western Andreanofs is 175 miles from Kiska.

Attu is nearly a thousand air miles from the Alaska mainland. Kiska lies 180 miles southeast of Attu. This westernmost end is actually nearer to Russian and Japanese territory than to Alaska. Attu is only about 460 miles from the Kamchatka Peninsula of the U. S. S. R., and some 750 miles from the Kurile (or Chishima) Islands to the south, held by Japan.

### Arc of Islands Would Span a Third of U. S.

If spread out across the U. S., the sweeping arc of the Aleutian Islands would stretch from Washington, D. C., to Des Moines, Iowa.

The volcanic Aleutians, which include a dozen larger islands and innumerable smaller ones, are generally mountainous, with rocky and often precipitous shores. Navigation there is extremely dangerous because of the many islets, shoals, and hidden rocks lying offshore. These hazards are usually made worse by frequent fogs and gales.

Attu Island, which rises to a height of over 3,000 feet, is especially rugged, with its volcanic rock deeply fissured. In general, it offers unfavorable ground for air bases; a few areas can be made into emergency fields by use of steel mats.

Attu, 35 miles long, is irregular in shape, deeply cut in the south by a number of long, slim inlets. The well charted and more traveled Chichagof and Sarana bays in the northeast are considered good harbors. Chichagof, however, is so small that mariners are likely to miss it in thick weather. Attu Village, with 44 inhabitants in 1939, is at the head of Chichagof Harbor.

### Aleutian "Weather Factory" Sends Storms to U. S.

Kiska Island, about 20 miles long, and with more open space than Attu, has a high mountain backbone which rises in the north to more than 4,000 feet. On the low east coast is Kiska Harbor, a broad and deep indentation, further protected by Little Kiska Island extending across its mouth.

With the exception of Attu and Atka (the latter one of the larger eastern members of the Andreanof group), few of the western islands are inhabited. Most of the few remaining Aleuts (a Russianized relative of the Alaskan Eskimo) now live on the three or four major islands near the eastern or Alaska end of the chain (illustration, next page).

Mariners fear the fog-bound Aleutians as the home of a shipwrecking wind called the williwaw. Meteorologists look on them as a sort of winter weather factory for the United States.

The williwaw, which sweeps from Aleutian mountains into harbors with little warning, has only local significance. But the weather phenomenon known to scientists as the Aleutian Low—referring to air pressure indicated by the barometer—sends cloudiness, rain, snow, or even fierce storms to wintertime Canada and the U. S.



*Maynard Owen Williams*

**"TREADING WATER" IN CHEKIANG MEANS HARD WORK, NOT SWIMMING**

A primitive one-man-power water wheel near Hangchow can lift enough water from the canal to irrigate a small rice field. It is built like the paddlewheel of a boat. As the man treads a paddle down, other paddles scoop water into the irrigation ditch. For larger farms a mule-power wheel is used, but work animals in Chekiang are less numerous than men. The province's crowded population cannot spare land for grazing animals. On the path a suburban farmer and his wife are carrying fertilizer to their fields in wooden buckets slung on a bamboo pole over their shoulders. In the background rises the needle-pointed 1,000-year-old Pao Shu Pagoda, one of Chekiang's show-places (Bulletin No. 4).

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### Eritrea Holds U. S. Troops in Climatic Frying Pan

**E**RITREA, on Africa's Red Sea edge, is a lamb-chop-shaped land sizzling in a climatic frying pan. American forces stationed there, for building and operating plants to repair war equipment from neighboring battlefields, are encountering heat to which few of them were accustomed in the United States.

Eritrea was part of Italian East Africa until the British conquest in 1941. It was originally about as large as Vermont and New Hampshire combined, nearly 16,000 square miles, but the Italian annexation of three districts of Ethiopia to the south, in 1936, expanded its area considerably. Ten years ago, at the last census, the population was about 600,000. That figure, however, included only about 4,100 Italians, a number since then considerably increased by Italy's African campaigns.

#### Coast Is Torrid, Highlands Cooler

For 670 miles the colony fronts the Red Sea, that vital link between the Mediterranean and the Indian Ocean. The hot coast of Arabia lies across the Red Sea. West of Eritrea is the Anglo-Egyptian Sudan. On the south is Ethiopia. Within reach by boat or air are the battlefields of Egypt and Madagascar, as well as American bases throughout the Near and Middle East.

Along the narrow coastal shelf, Eritrea is low, sandy, and torrid. At Massaua in the northwest and Assab in the southeast, the colony's chief ports, thermometers frequently register 120 degrees Fahrenheit in the shade. But a few miles inland the land rises abruptly to a mountainous plateau, with peaks 9,000 feet high. There the high altitudes keep the temperature down. Asmara, the capital, though only 40 miles inland from Massaua, is much cooler because it stands on the lofty plateau more than 7,000 feet high. Rainfall there in the interior is adequate for crops of cotton, tobacco, coffee, bananas, citrus fruits, and sisal (for its fiber).

#### Assab a Port Planned for the Future

Asmara, before British occupation, was Italian in appearance and mode of life. More than half of its 98,000 people were Italians. Its churches and dwellings, coffee shops, and sidewalk cafes were Italian in design. In dress, furniture, and customs it was a true copy of the mother country. The city was served by Eritrea's network of motor highways and railroads. From its airport planes flew to Assab on the coast, to Bengasi in Libia, and to Ethiopian towns.

Assab, not far from the colony's southeastern frontier, has long shared with Massaua the colony's salt trade (illustration, cover). Italians boomed the port. It was intended to become the seaport for shipping the products of all interior Italian East Africa. A hard-surface road was built to Addis Ababa, capital of Ethiopia. Ten miles outside the port, at Macaca, a spacious airport was built. Large-scale harbor improvements—new piers, landing places, and an outer mole—replaced the primitive wharves which had been serviceable only for small native craft. The city's old Arab streets were brought up to date. Other novelties included refrigerator and power plants and an air-cooled hotel. New offices, shops, restaurants, and amusement places accented the modern note.

Massaua, in the northwest, Eritrea's No. 1 port, boomed during the Italo-Ethiopian war. From October, 1935, to April, 1936, more than 550 Fascist ships docked there, landing in all about 270,000 workers and soldiers, and more than

Bulletin No. 2, October 19, 1942 (over).



The Aleutian Low is semi-permanent—that is, it hovers over the rocky islands during the autumn, winter, and early spring. During this period the downward pressure of the air, measured by the barometer, is relatively light. This “depression” or “low” is caused by the heating of the air by warm ocean currents between two cold continental areas, Siberia and Alaska. Small “secondary lows” break off from this great mass of low-pressure air and drift eastward across the Gulf of Alaska, Canada, and the United States, causing storms.

During the summer, when the continents are warmer than the sea, the low-pressure center splits and the parts move inland to Siberia and Alaska.

The Aleutian fog, which has interfered with naval and air operations off the islands, is prevalent about six days out of seven. Fog, which helps the Japanese marauder to hide, may also blind him as well as American navigators in the treacherous channels between the islands or on the inadequately charted western reefs.

The thick foggy weather results from the mixing of warm, moist air from Pacific Ocean currents to the south and cold air from over the Bering Sea to the north.

Note: The Aleutian Islands are shown on a large-scale inset on the National Geographic Society's Map of the Pacific Ocean, and on a double-page map of Alaska in the *National Geographic Magazine*, September, 1942. A price list of maps may be obtained from the Society's headquarters in Washington, D. C.

For further information on the Aleutian Islands, see “The Lonely Aleutians,” in the *National Geographic Magazine*, September, 1942; and “Fog-Shrouded Aleutian Islands are U. S. ‘Gangplank’ toward Asia,” in the *GEOGRAPHIC SCHOOL BULLETINS*, May 11, 1942.

Bulletin No. 1, October 19, 1942.



Bernard R. Hubbard

#### SALMON RACK AND BOYS SHOW WHY ALEUTS LEFT THE ALEUTIANS

Most of the Aleutian Islands are now uninhabited, except for the larger ones nearest the mainland. The Aleut fathers could find more plentiful food, schools, and other advantages for their children in Alaska. The abundant salmon can be caught and dried on racks in the sun for winter use, and jobs in the salmon canneries help buy other foods for a varied diet. The Aleuts, close kin to the Eskimos, speak a different language and follow different customs, influenced largely by the Russians who ruled their islands and Alaska before the U. S. bought the territory. Their name came from Asia, where mainland tribes called them *eleuts*, a term which Russian discoverers modified to Aleuts. Only about 4,000 are counted in Alaska and all the Aleutians now.

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### Convoy Route to Russia Had 24-Hour Daylight

THE shortest sea route from Britain to Russia is a 1,500-mile-long loop around the Scandinavian Peninsula to the Arctic port of Murmansk or to Archangel on the White Sea. Over this route, presumably, under the protection of 75 warships, traveled the battling convoy which last month took Russia the greatest amount of supplies yet delivered on a single voyage.

Since May such convoys have traveled in constant peril—unless they could dash into the cover of summer fog—for they were visible for 24 hours a day, illuminated by the Arctic summer sun that never sets. Now the sunlight is dimming down to winter darkness, which will be complete by the last week in November.

In summer, after the sun builds up to 24-hour-a-day duty, it floods the region with constant sunlight but gives off noticeable heat only during the midday period, when it climbs highest in the sky. This area within the Arctic Circle, commonly and erroneously thought of as a vast barren wasteland of cold blue ice, on one summer day had the highest recorded temperature in all Europe—95 degrees, reported from a sun-bathed point on the coast of northeastern Norway. Eighty-five degree summer shade temperatures are not unusual.

### Masts Stick Through Top of Fog Blanket

Summer also brings the Arctic "skodde" to the seas. This layer of gray-black fog covers thousands of miles of sea, constantly advancing and receding, seldom touching Norway's north coast (illustration, next page). It shelters airplane-dodging convoys. Unlike early mariners who dreaded fog, today's sailors purposely dive into the fog banks which rise before them like walls. Occasionally this fog blanket is so low that sailors on the decks of vessels are invisible to one another, while lookouts in the crow's nests above can clearly see masts of other vessels poking through the layer of mist.

Because of the difference in temperature and humidity over land and water, fogs are almost always present somewhere in the Arctic. Along Russia's Murman Coast, the rugged, barren, granite cliffs are often shrouded for as long as 14 days without a break. The cloudy, ice-locked port of Archangel averages only about 28 cloud-free and fog-free days a year.

### Gulf Stream Keeps Lane Open

The danger from huge ice floes off the Murman Coast is negligible, although patches of loose ice—pancake and sludge—may occur in bays and inlets that indent the shores. The warm water of the Gulf Stream surging around Norway, together with the warm winds blowing from it, moderates the climate and keeps the vital port of Murmansk open the year round. Archangel, on the east side of the White Sea, is untouched by the influence of warming currents and winds and is more or less ice-locked from October until June. White Sea temperatures, with the exception of the extreme south, are well below freezing for much of the year.

Early Russians who peopled the snow-covered shores of the White Sea in the 16th and 17th centuries knew the full meaning of the cold winds and the ice-choked sea. They called the sea "Studen," meaning "cold." Later, because of the white rip tides, and the snow smothering the shores for ten long months of the year, the name was changed to the "White Sea."

But in this Arctic region, where in the calmer days of summer mirages may



700,000 tons of war materials. Their cargoes also included 12,000 motor vehicles and thousands of mules for pack duty.

A military city developed within the civilian city, as barracks, warehouses, supply depots, hospitals, and other buildings multiplied. To keep pace with this mushroom growth a plant was built capable of a daily production of 30 tons of ice and 700 tons of distilled water. Regular air and shipping services connected Massaua with Italy.

Note: Eritrea is shown on the National Geographic Society's new Map of the Theater of War in Europe, Africa, and Western Asia, issued as a supplement to the July, 1942, issue of the *National Geographic Magazine*.

For further information about Eritrea, see "With the Italians in Eritrea," in the *National Geographic Magazine* for September, 1935\*; and these GEOGRAPHIC SCHOOL BULLETINS: "Italy's Crumbling African Empire Equals 43 Per Cent of U. S. Area," February 10, 1941; and "Dumeira: Italian Stopper in the Red Sea Bottleneck," April 25, 1938.

(Issues marked by an asterisk are included in the special list of *National Geographic Magazines* available at 10¢ each in groups of ten.)

Bulletin No. 2, October 19, 1942.



Harald P. Lechenberg

#### THE HIGHLANDERS ARE CHRISTIANS OF LONG STANDING

Eritrea's Red Sea coast is peopled with Arabs of the Moslem faith for the most part, but the darker tribes of the highlands are Christians of the Coptic Church, which has endured in Africa for 16 centuries. Like their neighbors and relatives in Ethiopia to the south, the women braid their hair in a coiffure of tiny ridges and wear wide cotton skirts amply ruffled above their bare feet. Tribal patriarchs wear sandals of Biblical simplicity. The old gentleman in the picture wraps a robe around the white cotton suit with long sleeves and long white trousers which is the costume of man and boy alike.

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### Chekiang, China's Rich "Bomb-Tokyo" Province

JAPANESE war lords announced in the spring of 1941 that they had conquered the Chinese province of Chekiang. In the autumn of 1942 the news indicates that they were mistaken, for the Chinese are reclaiming the province, town by town. It is no coincidence that Chekiang is hotly disputed, for this is the easternmost of China's provinces, which military experts point out as the logical region for bases from which United Nations planes could take off to bomb Tokyo.

The city of Kinho, centrally situated and site of a modern airfield for which Chinese and Japanese have fought, is 1,300 air miles from Tokyo.

The smallest Chinese province, with 20 million inhabitants on less than 40,000 square miles, Chekiang occupies the coastline's eastward bulge into the China Sea, from the Chusan Islands to south of Wenchow. The province's northern landmark is funnel-shaped Hangchow Bay, where sea tides squeezed into the Tsientang River create the famous tidal bore, an advancing wall of water sometimes 15 feet high at Hangchow, 85 miles inland.

#### Chekiang a Chinese Synonym for Wall Street

Northern Chekiang, dominated by the city of Hangchow, is a fat green plain striped with an incredible number of canals. Like the Netherlands, it is ditched for irrigation and diked for flood control, and walled against the sea as far south as Ningpo. There the green and silver patchwork of rice paddies blankets the level landscape, where the rice seedlings have been transplanted by hand from their richly fertilized nursery beds to the soggy irrigated fields. In normal times, two acres of the fertile land would make a family prosperous.

To the south and west, Chekiang raises an arc of rugged highlands around the green northern "rice bowl." Tea shrubs march across the hills in orderly rows, or mulberry trees, pruned short, spread their stubby branches. Branches thick with mulberry leaves are cut off twice a year and sold to silkworm growers.

Silk, rice, and tea produced in the province have been the foundation of so many fortunes that Chekiang has the nickname, "birthplace of millionaires." The number of successful business men and bankers born there has made "the Chekiang men" an equivalent in China for Wall Streeters in the U. S. Generalissimo Chiang Kai-shek is a son of Chekiang, born at Fenghua, near Ningpo.

#### Chekiang Silk as Famous as Shantung

The pure white delicate silk of Chekiang has been as famous as the coarser tannish silk of Shantung. An old Chinese proverb advises, "To buy silks and satins you must go to Soochow and Hangchow." Marco Polo, touring the province in the 13th century, marveled how the city dwellers clothed themselves in silk. Later observers commented that the people of Hangchow insisted on dressing in silk even if they could afford no other luxury.

Because of its excellent pottery clay, the province shared in the fame of China's porcelain makers under the Ming Dynasty five centuries ago, when their famous glaze first hardened on eggshell-thin bowls patterned in blue willows or landscapes of green, violet, and brown. A native son of the province, Tai Chin, with the encouragement of Ming emperors, founded the Chekiang school of landscape painting, which influenced Chinese art for several centuries.

Center of much of the province's early splendor was Hangchow, the official

appear before the eyes of land-hungry sailors, and where in the darkness of winter the colorful Aurora Borealis can be seen quivering in the skies, not all things are held down by the cold hand of the weather. Lands upon which the sun spreads its light and warmth are covered in the short summer months with brilliant flowers. Because of the unbroken sunlight, vegetation grows twice as rapidly as in the tropics.

It is true that Arctic winters may bring temperatures as low as 50 degrees below zero (and even 94 below at Verkhoyansk in Siberia). Winds in the Arctic are weaker than in many other sections of the world. In fact, so quiet are the winds at certain times of the year that in early days "wizards" in Finland, with a weather eye for business, sold the wind to becalmed sailors at so much a knot. Three knots were tied in a piece of cloth, and when the sailor wished for a gentle whisper of wind he untied the first knot. Untying the second knot was supposed to release a halfhearted gale. But if he had the courage to risk untying the third, he would be whipped out to sea by a full-sized gale.

In parts of Estonia—south of Finland across the Baltic—some peasants still believe that the stinging spring winds screaming across their country from the north, bringing rheumatism and other sickness, are the result of the untying of these knots sold to the sailors by the Finns.

Note: The convoy route to Russia may be traced on the National Geographic Society's Map of the Theater of War in Europe, Africa, and Western Asia.

Bulletin No. 3, October 19, 1942.



A. B. Wilse

#### NORWAY'S ARCTIC-MOST TIP HAS LESS WIND THAN ILLINOIS

The 1,000-foot-high cliffs of North Cape's headlands, where convoys between England and Russia round the northernmost extension of Norway above the Arctic Circle, have less ice, gales, snow, and high winds—thanks to the warm Gulf Stream—than their location would lead one to expect. Drift or polar pack ice, which covers at least two-thirds of the Arctic Ocean, seldom reaches closer than within 200 miles. Ice came within 80 miles, however, in April, 1929, the same spring when icebergs were sighted for the first time off the coast of Murmansk. There is less storminess and actually less snowfall in these Arctic regions than in either Scotland or Illinois. Arctic winds are generally weak, not even whipping up high waves against the North Cape cliffs, although a temperamental "blow" may whisk a ship from its course occasionally. The summer sun, shining 24 hours a day for more than 80 days a year in these latitudes, brings the Arctic some of Europe's hottest temperatures.

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### Geo-Graphic Brevities

#### WAR BOOMS SHARK FISHING

**A**XIS U-boat operations off Florida haven't stopped commercial fishermen from bringing in their daily hauls of sharks. In fact, the war that cut off America's cod-liver oil from Norway has boomed the domestic shark-fishing industry. The shark's liver, accounting for almost a fourth of the shark's total weight, contains as much as 80 per cent oil, which is rich in vitamin A and can substitute for cod-liver oil.

More than half of the vitamin A made in the United States now comes from shark livers. The new demand forced prices in 1941 for California sharks from a few hundred dollars a ton to more than \$1,500. But the shark contributes more than its liver to commerce. Every part can be used, the saying goes, but its breath. Its fins—lopped off as soon as the fish is dead—find their way into the soup bowls of the Orientals. Fins often bring as much as \$2.50 a pound. Far East natives have eaten shark for centuries, but only recently have Americans unsuspectingly eaten it sometimes under such names as "filet of sole" or "sword-fish."

Shark hides, once used as "sandpaper" in carpenter shops and as sword hilts for Japanese warriors, now parade as fine leather shoes, luggage, belts, and purses. A ton of shark yields about 90 square feet of leather.

The teeth (a shark may have as many as 100 to 150 salable teeth), jaws, and eyes are generally sold as novelties. Backbones are turned into walking sticks, and the carcasses become high-protein poultry feed or fertilizer. Low-grade shark oils are used by soap makers, leather tanners, and paint and steel manufacturers.

More than 150 species of sharks range the tropical and sub-tropical waters of the world (illustration, next page). Florida commercial fishermen seek only ten of them, the "eastern sharks"—the leopard, dusky, brown, sand, sandbar, blacktip, mackerel, hammerhead, sawfish, and nurse sharks. Some weigh 1,500 pounds. Many are 7 feet long. The soupfin is the most valuable California shark. Its liver has the highest vitamin A content. The yearly catch of this type alone runs into millions of pounds.

Note: For further information on shark fishing, see "Shark Fishing—An Australian Industry," in the *National Geographic Magazine*, September, 1932.

*The Book of Fishes*, published by the National Geographic Society, contains information about shark fishing, as well as illustrations in color and black and white. A price list of Nature Books may be obtained from the Society's headquarters in Washington, D. C.

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#### CANTERBURY, ENGLISH VICTIM OF GERMAN REPRISAL BOMBING

**A** NON-INDUSTRIAL cathedral town with fewer than 25,000 inhabitants. Canterbury became one of the targets for Nazi bombing raids in reprisal for the 1,000-plane British attack on Cologne.

The town, which is some 60 miles southeast of London, is noted for its historic cathedral and also as the place of residence of the Archbishop of Canterbury, head of the Church of England. It might be called the religious capital of the British people.

Railways pass south of Canterbury, taking more direct routes from London

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capital, with nearly a half-million peacetime inhabitants making it normally China's eighth largest city. (When the Japanese captured it, the provincial government moved to the southwest.) Marco Polo admired its broad boulevards, wider than any cramped European street, and the beauty of its park-bordered Lake Si-wu, dotted with lotus blossoms. Travelers, recalling the proverb, "Heaven is above, but Soochow and Hangchow are on earth," still visited the city before the war. Now Hangchow is important as a traffic junction on the railroad from Peiping in the north through Shanghai to south China. It is also the official southern terminus of the famous Grand Canal, crowded north-south water link between the rice-raising south and the grain fields of China's north. Winding nearly 1,000 miles, the Grand Canal is considered the longest artificial waterway in use. Parts of it were dug 2,400 years ago.

In Chekiang, where canals and ponds are numerous, so are ducks. Eggs are hatched in primitive incubators. Some of the duck eggs are preserved in lime for a month to make the popular delicacy known as pi-tan. They are ready to be eaten when the white has turned to a green solid and the yolk is a brownish jelly.

Note: China's Chekiang Province appears on the National Geographic Society's Map of Asia. Hangchow, the official capital, is described in "Ho for the Soochow Ho," *National Geographic Magazine*, June, 1927. See also "Grand Canal Panorama" in the April, 1937, *Magazine*.

Bulletin No. 4, October 19, 1942.



Maynard Owen Williams

#### THE HANGCHOW MILITARY OVERSEE A CIVILIAN OFFENSIVE AGAINST DIRT

Where the ancient Grand Canal meanders through Chekiang, collecting smaller branch canals on either side, the traveler encounters an average of three canals a mile. Bridges therefore are a characteristic feature of north Chekiang's landscape, many of them built by Ming emperors five centuries ago. Because wood has long been scarce in China, many are of finely cut and fitted stone, like this half-moon arch at Hangchow, southern terminus of the Grand Canal. In the shelter of the little bridge's massive, weed-grown abutment, Hangchow housewives in thickly padded cotton garments launder both the family's clothes and the vegetables for their dinner. Lacking washboard or soap, the women fold the wet garments and pound them with wooden bats. Taken before Japanese capture of Hangchow, the photograph shows Chinese soldiers, plump in their padded cotton uniforms and white cotton puttees.

to England's south coast. The march of modern industry passed the cathedral town by. There are such activities as brick yards and tanneries, but, aside from its religious duties, it is maintained largely by tourists, and by farmers who come there to trade. Thus the town has no military objectives.

Since the founding of the city in the 6th century on the ruins of early Roman buildings, Canterbury has been prominent in British history. Its greatest press agent was the poet Chaucer, whose *Canterbury Tales* are familiar to American school children.

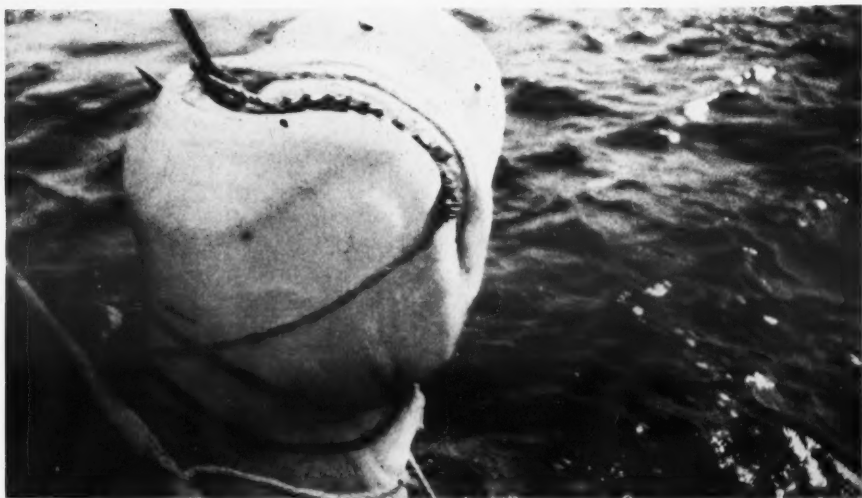
The religious pilgrimages made famous by Chaucer were stopped by Henry VIII in 1538, but Canterbury remains in peacetime the mecca of tourists. The cathedral, founded by the English saint, Augustine, is a reminder of other wars, for it was damaged in Danish invasions and burned the year after the Norman Conquest. It was rebuilt and later completed in its present form in 1495.

In anticipation of a possible air attack, the irreplaceable stained glass windows, which are of 13th and 14th century craftsmanship, were removed in 1939 and stored in the crypt.

Canterbury lies at the head of navigation of the Stour River and is at the meeting point of several highways. In the horse and buggy days, Canterbury was on the most traveled highway of England, from London to Dover. Only one of the six medieval gates of the walled town remains.

Note: Canterbury is shown on the National Geographic Society's Modern Pilgrim's Map of the British Isles.

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#### THE MAN-EATING SHARK NOW FALLS VICTIM TO SHARK-EATING MAN

Now that people have added shark meat (under other names) to their seafood menu and have extracted vitamin A from shark-liver oil, the dangerous shark is caught commercially. In U. S. waters the fishing is done with baited and anchored lines left overnight as well as with nets. In Australia, another center for commercial shark-fishing, a big net is used. When hauled into the boat, the fighting monster is shot or dispatched with an iron rod. This tiger shark, caught in Australian waters, shows the big mouth (sometimes more than a yard wide), and rows of sickle-shaped, razor-edged teeth that make his kind a menace to bathers. His nostrils are visible, but his eyes are farther back on his head. In addition to nostrils, he has a half-dozen gills on each side. Such a "tiger" may have a liver 13 feet long and a brain smaller than a man's fist. The tiger's name comes from his fierce disposition and from the dark brown stripes that mark him in infancy, then disappear as he matures. Sharks have no true bones (their frames are of cartilage) and can grow as many sets of teeth as they need.



